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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,564	12/11/2003	Robert W. Kooker	ANCO/55USI	8755
26875	7590	04/20/2004	EXAMINER	
WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			VU, PHUONG T	
			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/733,564

Applicant(s)

KOOKER ET AL.

Examiner

Phuong T. Vu

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 5, there is no antecedent basis for the recited main amplifier subcircuit and error amplifier subcircuit.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 7-8, 10-13, 16, 27-30, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Powell et al. (US 4,612,512). Regarding claim 1, the reference discloses an amplifier comprising a chassis body 80 with a conductive floor configured for supporting amplifier subcircuits, a lid structure 72 for positioning with the chassis body over the subcircuits, the lid structure having at least one side wall extending therefrom for surrounding a subcircuit and electrically isolating the subcircuit from the other amplifier subcircuits.

Regarding claim 2, the lid structure has multiple sidewalls for isolating multiple subcircuits.

Regarding claim 3, the sidewalls are integrally formed with the lid structure.

Regarding claim 4, the amplifier further comprises a main amplifier subcircuit 14 and an error amplifier subcircuit 50, the lid structure including a dividing wall extending between the main and error amplifier subcircuits and electrically coupled to the chassis floor for isolating the amplifier subcircuits.

Regarding claim 7, the lid structure includes at least one other sidewall extending from a side of the lid structure opposite the at least one sidewall for isolating subcircuits on both sides of the lid structure.

Regarding claim 8, the sidewalls form multiple cavities for isolating the multiple subcircuits.

Regarding claim 10, the reference discloses an amplifier comprising a chassis body 80, a lid structure 72 for coupling with the chassis body to contain amplifier subcircuits, at least one of the chassis body and lid structure having at least one side wall extending therefrom for surrounding a subcircuit and electrically isolating the subcircuit from other amplifier subcircuits.

Regarding claim 11, the lid structure has multiple sidewalls for isolating multiple subcircuits.

Regarding claim 12, the at least one sidewall is integrally formed with the lid structure.

Regarding claim 13, the amplifier comprises a main amplifier subcircuit 14 and an error amplifier subcircuit 50, and a dividing wall extending between the main and

error amplifier subcircuits and electrically coupled between the lid structure and chassis body for isolating the main and error amplifier subcircuits.

Regarding claim 16, the at least one chassis body and lid structure includes at least one other sidewall extending from a side thereof opposite the at least one sidewall for isolating subcircuits on both sides of the at least one chassis body and lid structure.

Regarding method claims 27-30, 32 one would necessarily perform the recited method steps in assembling the amplifier rejected above.

5. Claims 1-3, 7-12, 16-17, 27-28, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Jewell et al. (US 4,661,888). Regarding claim 1, the reference discloses a device comprising a chassis body 10 with a conductive floor configured for supporting subcircuits including amplifier subcircuits, a lid structure 12 for positioning with the chassis body over the subcircuits, the lid structure having at least one side wall extending therefrom for surrounding a subcircuit and electrically isolating the subcircuit from the other amplifier subcircuits. It has been held that the recitation that an element is "adapted to" or "for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Furthermore, the recitation of the amplifier in the preamble has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. *Kropa v. Robie*, 88 USPQ

478 (CCPA 1951). Alternatively, the reference discloses that the device is an RF module which would inherently have subcircuits including an amplifier subcircuit.

Regarding claim 2, the lid structure has multiple sidewalls for isolating multiple subcircuits.

Regarding claim 3, the sidewalls are integrally formed with the lid structure.

Regarding claim 7, the lid structure includes at least one other sidewall extending from a side of the lid structure opposite the at least one sidewall for isolating subcircuits on both sides of the lid structure.

Regarding claim 8, the sidewalls form multiple cavities for isolating the multiple subcircuits.

Regarding claim 9, the subcircuits are mounted on a circuit board and further comprising a gasket 25 coupled between the sidewall and the circuit board for electrically isolating the subcircuits.

Regarding claim 10, the reference discloses an amplifier comprising a chassis body 10, a lid structure 12 for coupling with the chassis body to contain amplifier subcircuits, at least one of the chassis body and lid structure having at least one side wall extending therefrom for surrounding a subcircuit and electrically isolating the subcircuit from other amplifier subcircuits.

Regarding claim 11, the lid structure has multiple sidewalls for isolating multiple subcircuits.

Regarding claim 12, the at least one sidewall is integrally formed with the lid structure.

Regarding claim 16, the at least one chassis body and lid structure includes at least one other sidewall extending from a side thereof opposite the at least one sidewall for isolating subcircuits on both sides of the at least one chassis body and lid structure.

Regarding claim 17, the subcircuits are mounted on a circuit board and further comprising a gasket 25 coupled between the sidewall and the circuit board for electrically isolating the subcircuits.

Regarding method claims 27-28, 32 one would necessarily perform the recited method steps in assembling the device rejected above.

6. Claims 1-3, 7-8, 10-12, 16, 27-28, 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Casebolt (US 5,774,344). Regarding claim 1, the reference discloses a device comprising a chassis body 12 with a conductive floor configured for supporting subcircuits including amplifier subcircuits, a lid structure 24 for positioning with the chassis body over the subcircuits, the lid structure having at least one side wall 120 extending therefrom for surrounding a subcircuit and electrically isolating the subcircuit from the other amplifier subcircuits. It has been held that the recitation that an element is "adapted to" or "for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. Furthermore, the recitation of the amplifier in the preamble has not been given patentable weight because it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory

clause. *Kropa v. Robie*, 88 USPQ 478 (CCPA 1951). Alternatively, the reference discloses that the device is an RF module which would inherently have subcircuits including an amplifier subcircuit.

Regarding claim 2, the lid structure has multiple sidewalls for isolating multiple subcircuits.

Regarding claim 3, the sidewalls are integrally formed with the lid structure.

Regarding claim 7, the lid structure includes at least one other sidewall extending from a side of the lid structure opposite the at least one sidewall for isolating subcircuits on both sides of the lid structure.

Regarding claim 8, the sidewalls form multiple cavities for isolating the multiple subcircuits.

Regarding claim 10, the reference discloses an amplifier comprising a chassis body 12, a lid structure 24 for coupling with the chassis body to contain amplifier subcircuits, at least one of the chassis body and lid structure having at least one side wall 120 extending therefrom for surrounding a subcircuit and electrically isolating the subcircuit from other amplifier subcircuits.

Regarding claim 11, the lid structure has multiple sidewalls for isolating multiple subcircuits.

Regarding claim 12, the at least one sidewall is integrally formed with the lid structure.



Regarding claim 16, the at least one chassis body and lid structure includes at least one other sidewall extending from a side thereof opposite the at least one sidewall for isolating subcircuits on both sides of the at least one chassis body and lid structure.

Regarding method claims 27-28, 32 one would necessarily perform the recited method steps in assembling the device rejected above.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-8, 10-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Posner et al. (US 6,531,918B1) in view of Casebolt (US 5,774,344). Regarding claim 1, the Posner reference discloses an amplifier with amplifier subcircuits. Posner provides a detailed discussion on the operation of subcircuits but is silent regarding any structural details of the amplifier including a circuit board upon which the subcircuits are positioned and a housing which receives the circuit board. It is required that the subcircuits be formed on a circuit board and necessary that the circuit board be provided with a housing to enclose the circuit board as well any other electronics to protect the entire assembly from environmental conditions such as light, heat, moisture, dust, etc. which would damage the amplifier assembly. Furthermore, such a housing would provide mechanical support, some shock protection, and electromagnetic interference shielding. Casebolt discloses a known chassis body 12 with a conductive

floor configured for supporting subcircuits, a lid structure 24 for positioning with the chassis body over the subcircuits, the lid structure having at least one side wall extending therefrom for surrounding a subcircuit and electrically isolating the subcircuit from the other subcircuits. The Casebolt reference is relied upon solely for this teaching. It would have been obvious to those skilled in the art at the time the invention was made to provide the amplifier subcircuits with a circuit board 32 and a housing as disclosed by Casebolt for the above-mentioned advantages.

Regarding claim 2, the lid structure has multiple sidewalls for isolating multiple subcircuits.

Regarding claim 3, the sidewalls are integrally formed with the lid structure.

Regarding claim 4, Posner teaches that the amplifier further comprises a main amplifier subcircuit 14 and an error amplifier subcircuit 102, the lid structure including a dividing wall extending between the main and error amplifier subcircuits and electrically coupled to the chassis floor for isolating the amplifier subcircuits.

Regarding claim 5, at least a portion of the main amplifier subcircuit and at least a portion of the error amplifier subcircuit would be mounted on a single circuit board as disclosed by Casebolt. The circuit board having at least one cut-out (aligned with islands 30) which would be positioned between the main and error amplifier subcircuits, the dividing wall including an island 30 for passing through the cut-out to electrically couple to the chassis floor.

Regarding claim 6, the dividing wall includes multiple islands which pass through multiple cut-outs in the circuit board to electrically couple to the chassis floor.

Regarding claim 7, the lid structure includes at least one other sidewall extending from a side of the lid structure opposite the at least one sidewall for isolating subcircuits on both sides of the lid structure.

Regarding claim 8, the sidewalls form multiple cavities for isolating the multiple subcircuits.


Regarding claims 10-26, please refer to the above rejection.

Regarding method claims 27-32 one would necessarily perform the recited method steps in assembling the amplifier rejected above.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Vu whose telephone number is (571) 272-2111. The examiner can normally be reached on Mon. & Tues., 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S. Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patent Examiner  
4-16-04